

C1  
cont. hybridizing with the complement of the nucleotide sequence of SEQ ID NO:1 at 20°C below the DNA melting.

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C2  
9. (Twice amended) The method of Claim 8, wherein said protease-related protein is administered in the form of a nucleic acid expressing it.

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16. (Amended) The method of Claim 9 or 18, wherein said nucleic acid expressing said protein comprises:

- C3
- (a) the nucleotide sequence of SEQ ID NO:1;
  - (b) a nucleotide sequence hybridizing to the nucleotide sequence of SEQ ID NO:1 at 20°C below the DNA melting;
  - (c) a nucleic acid encoding the same amino acid sequence as the nucleic acid sequence of (a) or (b), but having a different nucleotide composition due to the degenerated genetic code; or
  - (d) the complement of (a), (b), or (c).

17. (Amended) The method of Claim 9 or 18, wherein said nucleic acid expressing said protein comprises an expression plasmid comprising:

- (a) the nucleotide sequence of SEQ ID NO:1;
- (b) a nucleotide sequence hybridizing to the nucleotide sequence of SEQ ID NO:1 at 20°C below the DNA melting;
- (c) a nucleic acid encoding the same amino acid sequence as the nucleic acid sequence of (a) or (b), but having a different nucleotide composition due to the degenerated genetic code; or

C3  
CONT

(d) the complement of (a), (b), or (c).

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Please add the following new Claims 18-23:

C4  
18. (New) The method of Claim 8, comprising administering a polynucleotide encoding said protease-related protein and expressing a therapeutically effective amount of the same.

19. (New) A composition for the negative regulation of the keratinization of hair comprising a protease-related protein and a pharmaceutically acceptable carrier, wherein said protease-related protein is encoded by a nucleotide sequence hybridizing with the complement of the nucleotide sequence of SEQ ID NO:1 at 20°C below the DNA melting.

20. (New) The composition of Claim 19, wherein said protease-related protein comprises the amino acid sequence of SEQ ID NO:2.

21. (New) A method for the negative regulation of the keratinization of hair comprising administering a therapeutically effective amount of a protease-related protein, wherein said protease-related protein comprises the amino acid sequence of SEQ ID NO:2.

22. (New) A method for the negative regulation of the keratinization of hair, comprising administering a therapeutically effective amount of the composition of Claim 19.

23. (New) A method for the negative regulation of the keratinization of hair, comprising administering a therapeutically effective amount of the composition of Claim 20.